## SC Exhibit 9

## Duke Energy Progress Actual Program Costs for Vintage Year 2019 Docket Number E-2020 xxxx

				arolinas System - 12 Months Ended 12/31/2019
1	Appliance Recycling Program		ć	
2	Appliance Recycling Program Appliances and Devices		\$ \$	- 2,160,799
3	Residential Service – Smart \$aver		* * * * * * * * * * * * * * * * *	6,411,758
4	Energy Efficient Lighting		\$	11,993,695
5	Neighborhood Energy Saver		\$	1,671,298
6	Residential New Construction		\$	15,113,951
7	Residential Energy Efficient Benchmarking		\$	-
8	Residential Home Advantage		\$	-
9	Energy Education Program for Schools		\$	747,483
10	Multi-Family Energy Efficiency		\$	2,156,484
11	My Home Energy Report		\$	6,299,307
12	Residential Energy Assessments		\$	2,113,798
13	Save Energy and Water Kit		\$	-
14	Low Income Weatherization Pilot		\$	27,356
15	Business Energy Report		\$	-
16	Energy Efficiency for Business		\$	-
17	Energy Efficient Lighting		\$	1,453,336
18	Non-Residential Smart Saver Custom		\$	2,776,482
19	Non-Residential Smart Saver - Prescriptive		\$	7,877,838
20	Non-Residential Smart \$aver Performance Incentive		\$	267,186
21	Small Business Energy Saver		\$	7,301,790
22	EnergyWise Home		\$ \$ \$ \$ \$ \$	15,117,800
23	EnergyWise for Business		\$	2,412,880
24	Commercial, Industrial, & Governmental Demand Res	ponse	\$	1,715,824
25	Total Energy Efficiency & Demand Side Program Cost	Sum(Lines 1-24)	\$	87,619,068
				SC Allocated - 12 Months Ended
				12/31/2019 (1)
28	Appliance Recycling Program	Line 1 * Line 26	\$	-
29	Appliances and Devices	Line 2 * Line 26	\$	310,427.98
30	Residential Service – Smart \$aver	Line 3 * Line 26	\$	921,135.55
31	Energy Efficient Lighting	Line 4 * Line 26	\$	1,723,056.04
32	Neighborhood Energy Saver	Line 5 * Line 26	\$	240,104.47
33	Residential New Construction	Line 6 * Line 26	\$	2,171,322.83
34	Residential Energy Efficient Benchmarking	Line 7 * Line 26	\$	-
35	Residential Home Advantage	Line 8 * Line 26	\$	-
36	Energy Education Program for Schools	Line 9 * Line 26	\$	107,386.05
37	Multi-Family Energy Efficiency	Line 10 * Line 26	\$	309,808.05
38	My Home Energy Report	Line 11 * Line 26	\$	904,980.45
39 40	Residential Energy Assessments	Line 12 * Line 26 Line 13 * Line 26	\$ ¢	303,675.59
40 41	Save Energy and Water Kit Weatherization - Electric	Line 13 * Line 26	\$ ¢	2 020 00
41 42	Weatherization - Electric Business Energy Report	Line 14 * Line 26 Line 15 * Line 26	\$ \$	3,930.09
42 43	Energy Efficiency for Business	Line 15 * Line 26	\$ \$	<u>-</u>
43 44	Energy Efficient Lighting	Line 17 * Line 26	\$ \$	- 208,791.37
45	Non-Residential Smart \$aver Custom	Line 17 Line 26	\$	398,879.14
46	Non-Residential Smart Şaver Prescriptive	Line 19 * Line 26	\$	1,131,757.72
47	Non-Residential Smart \$aver Performance Incentive	Line 20 * Line 26	\$	38,384.94
48	Small Business Energy Saver	Line 21 * Line 26	\$	1,049,000.63
49	EnergyWise Home	Line 22 * Line 27	\$	2,012,030.29
50	EnergyWise for Business	Line 23 * Line 27	\$	321,130.54
51	Commercial, Industrial, & Governmental Demand Res		\$	228,359
52	Total Energy Efficiency & Demand Side Program Cos	Sum (Lines 21-39)	\$	12,384,161

SC Exhibit 10

## Duke Energy Progress, LLC January - December 2019 Actuals January 2020 - December 2021 Estimates Docket No. XXX South Carolina Found Revenues

				Actual/Repo	rtec	d KWH				Estimat	ed k	(WH	Decision Tree
		2016		2017		2018		2019	2	020		2021	Node
conomic Development		11,000,000		34,800,000		15,500,000	15	5,271,400		-		-	Box 5 - exclude
ighting		-		-		-		-		-		-	
Residential		9,257		7,589		5,634		122		122		122	Box 6 - include
Non Residential (Regulated)		49,512		42,441		27,096		1,764		1,764		1,764	Box 6 - include
MV to LED Credit - Residential (Regulated)		(191,894)		(189,023)		(695)		(448)		(687)		(687)	Box 6 - include
MV to LED Credit - Non-Residential (Regulated)		(35,070)		(34,793)		(201)		(104)		(160)		(160)	Box 6 - include
Total KWH		10,831,805		34,626,214		15,531,834	15	5,272,734		1,039		1,039	
otal KWH Included		(168,195)		(173,786)		31,834		1,334		1,039		1,039	
otal KWH Included (net of Free Riders 15%)		(142,966)		(147,718)		27,059		1,134		883		883	
nnualized Found Revenue - Non Residential	\$	7,607	\$	4,710	ς .	17,106	ς .	1,072	\$	946	\$	1,049	
Innualized Found Revenue - Residential	\$	(109,476)	_	(127,606)		3,448		(243)		(367)		(426)	
		2016		2017		2018		2019	2	020		2021	
Vintage 2016 - Non Res	\$	4,852		7,607		7,607		1,689		_			
Vintage 2017 - Non Res	7	1,032	\$	4,066		4,710		3,344		324		_	
Vintage 2018 - Non Res			Y	1,000	\$	10,809		17,106		17,106		6,297	
Vintage 2019 - Non Res					Ψ	_0,000	\$	541	\$	1,072	\$	1,072	
Vintage 2020 - Non Res							Ψ.	9.2	\$	513		946	
Vintage 2021- Non Res									*	0-0	Ψ.	568	
Net Negative Found Revenues to Zero*		-		_		_		_		_		-	
Subtotal - Non Res	\$	4,852	\$	11,672	\$	23,126	\$	22,680	\$	19,015	\$	8,883	
Vintage 2016 - Res	\$	(59,359)		(109,476)		(109,476)		(34,263)		-		-	
Vintage 2017 - Res			\$	(68,666)		(127,606)		(91,638)		(30,460)		-	
Vintage 2018 - Res					\$	2,186		3,448		3,448		1,262	
Vintage 2019 - Res							\$	(122)	\$	(243)	\$	(243)	
Vintage 2020 - Res								:	\$	(199)	\$	(367)	
Vintage 2021 - Res											\$	(231)	
Net Negative Found Revenues to Zero*		59,359		178,142		234,896		122,575		27,454			
Subtotal - Residential	\$	-	\$	-	\$	-	\$	- !	\$	-	\$	421	

1

	6/18/2020
	0/18/2020

Demand Response Automation ('Program') allows Duke Energy Progress, LLC ('Company') to install data acquisition and optional load control devices to remotely monitor and control the following electrical equipment:

HVAC Variable speed motors

Lighting Non-critical, interruptible operations

Standby generation

Program participants agree to reduce their total metered demand by the seasonal contracted kilowatt (kW) amount during the time specified in the event notification. Participants may reduce their demand using any method, including the use of other power sources. In return, these businesses receive valuable incentives as follows:

- 1. A one-time participation incentive of \$50/kW for demonstrated demand reduction during initial summer event(s) on the program,
- 2. Monthly credits of \$3.25/kW for the contracted amount of curtailable demand, and
- 3. Performance credits of \$6/kW for demand reduced during each curtailment event.

#### Audience

The Program is available to commercial, industrial and governmental customers with a service base that is capable of contracting for a minimum of 75 kW in curtailable demand. Some exclusions apply based on rate schedules and participation in other riders.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	N/A	N/A	N/A
Savings (MW)	29.95	25.16	-4.79
Participants		71	
2019 Program Expenses		\$1,647,027	

#### D. Qualitative Analysis

#### **Highlights**

Although the Program was able to add more than 3MW of net new capacity in 2019, recruitment of new participants continues to be a challenge. Final EPA regulations prevent many originally targeted customers with older standby generators from participating in the program, while the rider minimum of three annual curtailment events remains a deterrent to many industrial customers. Larger customers interested in demand response programs also have an alternative through Rider LLC that does not have the DSM/EE Opt-In requirement.

The Company dispatched the program three times in 2019, all of which occurred during the summer to meet rider minimums.

#### **Potential Changes**

The Company has recently sought and received approval from the NCUC and PSC to remove barriers to Program growth through minor revisions to Rider DRA. Specifically, DEP proposes to change the required minimum number of annual summer events from three (3) to one (1), while simultaneously adjusting the monthly credit to maintain the current guaranteed annual incentive opportunity of \$57.00/kW. Additionally, we are proposing to reduce the required minimum contracted demand from 75kW to 50kW. The current target for implementing these changes in the billing system and making the rider revisions effective is March 21, 2020.

#### E. Marketing Strategy

The Company continues to market the Program directly through Large Account Management and has expanded efforts to reach eligible unassigned customers through various channels that include but are not limited to the following:

Direct mail (letters and postcards to qualifying customers)
Duke Energy Progress website
Email

Video

Trade event presence

Promotion by the Medium Business Energy Advisors team

Additional detailed program information is located at www.duke-energy.com/dra.

#### F. Evaluation, Measurement and Verification

The PY2018 EM&V of this program was presented in the Collaborative meeting at the second quarter 2019 Carolinas Collaborative. Objectives for the program evaluation included:

- Verifying the demand reduction calculated by DEP's method of baseline estimation
- Producing a set of verified program impacts by customer and for the program using the most accurate baseline
- Providing a detailed baseline approach and explanation of the kW impact calculations

The PY2018 findings are as follows:

- DEP called four winter DRA events and three summer DRA events during PY2018, involving 73 unique customer meters that each participated in at least one event
- The program achieved a verified average of 20.0 MW per summer event and 6.9 MW per winter, about 2% and 7%, respectively lower than reported impacts
- The average impact per meter was about 324 kW (summer) and 203 kW (winter), with impacts as low as about 48 kW and as high as over 2,700 kW for individual meters

The Save Energy and Water Kit Program ("SEWK") launched in November 2015. The Program is designed to increase the energy efficiency of residential customers by offering customers energy efficient water fixtures and insulating pipe tape for use within their homes.

The SEWK program is offered through a selective eligibility process, enabling eligible customers to request a kit and have it shipped directly to their homes. Customers owning and living in a single-family home with an electric water heater who have not received similar measures through another Company-offered energy efficiency program are eligible for the program. Kits are available in two sizes for homes with one or more full bathrooms and contain varying quantities of shower heads, bathroom aerators, kitchen aerator and insulating pipe tape. Program participants are eligible for one kit shipped free of charge to their home.

Customers are pre-screened based on the eligibility requirements. Marketing channels include both a direct mail business reply card (BRC) and direct email. Customers receiving the BRC may choose to return the BRC, navigate to a redemption website listed on the card, or call a toll-free number to take advantage of the offer. Customers receiving a direct email simply click on a redemption link to redeem the offer online. Upon receiving the order from the customer through one of the methods above, Energy Federation Inc. (EFI), the program vendor, will ship the pre-determined kit to the customer. Due to the unique eligibility requirements of this program, direct mail (BRCs) and direct email are the only two methods being used to solicit customers for participation.

The program has a website in place that customers can access to learn more about the program or to watch videos to aid in installing the kit measures.

#### **Audience**

The Program is available to customers residing in a single-family home with an electric water heater who have not received similar measures through another Company-offered energy efficiency program.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	30,940	16,709	-14,231
Savings (MW)	8.91	5.05	-3.87
Participants		253,098	
2019 Program Expenses		\$1,226,733	

#### D. Qualitative Analysis

#### **Highlights**

In 2019, the Program distributed over 246,000 water measures in over 25,000 kits to Duke Energy Progress customers in the Carolinas. These kits delivered approximately 51,486 bath aerators, 25,743 kitchen aerators, 40,364 showerheads, and 128,715 feet of pipe insulation. In 2Q 2019, Duke Energy added the ability for customers redeeming the offer online to upgrade their showerhead(s) to wide pattern or wand showerheads at low cost. Upgrades showerheads accounted for 6.32% of all showerheads shipped in 2019.

#### Issues

The program was successfully launched without any issues regarding ordering, fulfillment or support of the program. EM&V data shows a higher percentage of gas water heater customers participated in the program in 2016 than expected. In 2017, the electric water heater propensity model was updated in order to reduce participation by customers with gas water heaters.

#### **Potential Changes**

The Program continues to review new measures as replacement or upgrade options for the program.

#### E. Marketing Strategy

The overall strategy of the program is to reach residential customers who have not adopted low flow water devices.

Both direct mail marketing in the form of BRCs and direct email are the current marketing channels being utilized by this program in the Carolinas. O Email solicitation and online ordering continue to grow. As a result, the paper and cost associated with traditional mail solicitations continues to decline. Examples of the updated kit materials, direct mail, and direct email are included in the Appendix.

#### F. Evaluation, Measurement and Verification

Evaluation began in 2019, with a final evaluation report tentatively scheduled for 2<sup>nd</sup> Quarter 2020.

#### G. Appendix

### Save Energy and Water Kit Program Installation Guide







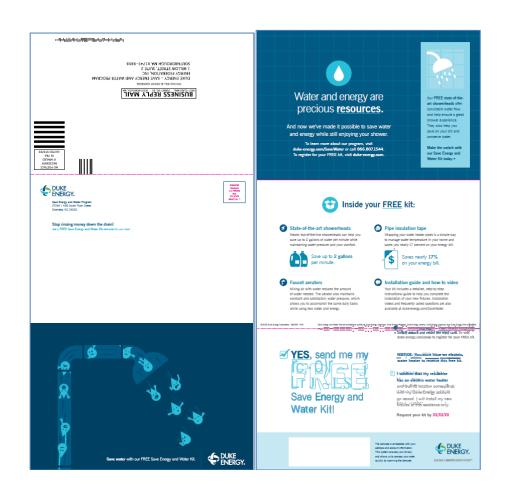




### Save Energy and Water Kit Program Thank You Survey Card



## Save Energy and Water Kit Program Direct Mail

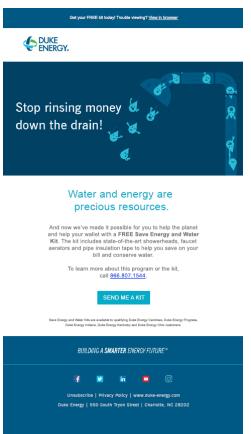


#### Save Energy and Water Kit Program Direct Mail





#### Save Energy and Water Kit Program Direct Email



The Duke Energy Progress, LLCs ('Company') EnergyWise Business ('Program') is an energy efficiency and demand response program for non-residential customers that allows the Company to reduce the operation of participants AC units to mitigate system capacity constraints and improve reliability of the power grid. The Program provides customers with options for how they would like to participate. In exchange for participation, the Company provides participants with an annual incentive applied directly to their bill.

Program participants can choose between a Wi-Fi thermostat or a load control switch which is professionally installed for free for each air conditioning or heat pump unit at the premise. In addition to choosing the equipment, the participants can also choose at what cycling level they would like to participate 30%, 50%, or 75%. During a conservation period, the Company sends a signal to the thermostat or switch to reduce the amount of time the unit is running by the percentage the participant selected. For participating at the 30% level, the customer receives a \$50 annual bill credit for each unit, \$85 for the 50% level, or \$135 for the 75% level. Additionally, participants with a heat pump unit with electric resistance emergency/back up heat that choose the thermostat can also participate in a winter option which allows the Company to control the emergency/back up heat. For 100% control of the emergency/back up heat, the Company provides an additional \$25 annual bill credit.

Participants choosing the thermostat have access to a portal that allows them to control their units from anywhere with internet access. They can set schedules, adjust temperature set points, and receive energy conservation tips and communications from the Company. In addition to the portal access, participants also receive notifications of upcoming conservation periods. These notifications allow participants to make adjustments to their schedules or notify their employees of the upcoming conservation period. Participants are allowed to override two conservation periods per year without penalty. They can activate an override before or during the conservation period.

#### **Audience**

The Program is available to existing non-residential customers that are not opted-out of the DSM Rider, have at least one air conditioner or heat pump that operates to maintain a conditioned space on weekdays during the calendar months of May through September, and are not served under Schedules LGS-RTP and SI, Riders NM, DRA, 57, 68 IPS, LLC or NFS. Also, customers must have an average minimum usage of 1,000 kWh during those same calendar months.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	1,537	55.15	-1,481
Savings (MW)	8.89	4.79	-4.09
Participants (EE & DR)		7,460	
2019 Program Expenses		\$2,382,632	

#### D. Qualitative Analysis

#### **Highlights**

During 2019, the Program continued to experience growth. The Program added over 2,153 net new devices bring the total installed devices to 6,403. The door to door marketing (canvassing) efforts have continued to be the most productive marketing efforts producing enrollments, installations and positive customer interactions. The Program canvassed in Raleigh, the greater Raleigh region, Wilmington and Florence SC. Through the canvassing efforts we touched over 10,000 customers during 2019.

Exhibit 11 Page 9 of 64

#### Issues

One factor that continues to impact the Program's overall performance is the high number of customers selecting to enroll in the 30% cycling option. 60% of customers are participating in this option. This is a slight improvement from the 62% participation in the 30% cycling option seen at the end of 2018. The original assumption when the Program was filed was that 50% of customers would select this option. Program staff worked with canvassers to improve their pitches to promote the higher cycling options, improving the current enrollment percentages and bringing them closer to the original assumptions. But, with the high percentage of customers participating in the 30% option in prior years, the overall percentage is slow to come down.

#### **Potential Changes**

The Program is evaluating the possibility of adding additional thermostat options to offer customers during the install. The new thermostat will reduce the number of installs that are turned down due to the current version not having features used by the customer.

#### E. Marketing Strategy

In 2019, the Program has continued to use a dedicated canvassing vendor for door-to-door marketing in Raleigh, the greater Raleigh region, and Wilmington. Additionally, the Program continues to see enrollments as a result of cross promotion efforts with the Small Business Energy Saver program and the Duke Energy Business Energy Advisors.

#### F. Evaluation, Measurement and Verification

No evaluation work was conducted in 2019.

The Energy Efficiency Education Program ('Program') is an energy efficiency program available to students in grades K-12 enrolled in public and private schools who reside in households served by Duke Energy Progress in North and South Carolina. The current curriculum administered by The National Theatre for Children ("NTC") provides performances in elementary, middle and high schools.

The Program provides principals and teachers with an innovative curriculum that educates students about energy, resources, the relationship between energy and resources, ways energy is wasted and ways they can be more energy efficient. The centerpiece of the curriculum is a live theatrical production focused on concepts such as energy, renewable fuels and energy efficiency and performed by two professional actors. Teachers receive supportive educational materials for their classrooms and assignments for students to take home. The workbooks, assignments, and activities meet state curriculum requirements.

School principals are the main point of contact for scheduling their school's performance. Once the principal confirms the performance date and time, all materials are scheduled for delivery two weeks prior to the performance. Materials include school posters, teacher guides, and classroom and family activity books.

Students are encouraged to compete a request form with their family (found in their classroom and family activity book, as well as online), to receive an Energy Efficiency Starter Kit. The kit contains specific energy efficiency measures to reduce home energy consumption. It is available at no cost to eligible Duke Energy customer households at participating schools.

#### **Audience**

Eligible participants include the Company's residential customers, with school-age children enrolled in public and private schools, who reside in households served by Duke Energy Progress.

#### **B &C.** Impacts, Participants and Expenses

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	2,315	3,284	969
Savings (MW)	0.98	0.39	-0.59
Participants		9,887	
2019 Program Expenses		\$745,829	

#### D. Qualitative Analysis

#### **Highlights**

The Company is supporting arts and theatre in schools while providing an important message about energy efficiency for students through an innovative delivery channel. Enhancing the message with a live theatrical production captivates the students' attention and reinforces the classroom curriculum materials provided.

For the 2018-2019 school year, elementary students enjoy watching Kilowatt Kitchen performed by two professional actors. Elementary schools will learn how to measure the energy we use and how we can reduce the energy we waste while watching Lorraine Quiche realize her dream of opening her own restaurant Kilowatt Kitchen. In this 25-minute educational play, Lorraine learns how to use energy wisely and saves the day for her Kilowatt Kitchen!

The E-Team is a 35-minute, live show for grades six through nine. The program consists of two actors with two goals. The first goal is to highlight how we measure energy, the uses of energy, how energy is

Exhibit 11 Page 11 of 64

wasted and renewable resources. The second goal is to make the middle school students laugh so hard that they forget they are learning. The show is a series of improvised comedy sketches between characters in all sorts of hilarious situations. Before each scene, actors interact with the audience and get ideas that will be used during the sketch, such as their favorite band or a household pet. The ideas are incorporated into the show and may change the course of a scene.

High School students enjoyed the 45-minute live performance titled "What's your Goal". The performance consists of segments including student volunteers to take part in a sketch called "Moving Bodies" where the volunteer has complete control over the movement of the two actors as the explore ways to save energy at home and discuss the impact that energy saving items can have. The second segment is a game show called "The Carbon Footrace". Students are placed on teams and asked questions about what a carbon footprint is and ways they can reduce their own carbon footprint. The last segment takes the form of an interactive "TED Talk" style presentation where the actors explore topics relating to the effects of global climate change and how it relates to industries and economies. The students are offered information on what they can go and what careers they can explore to help do their part for the future of the planet.

From January through December 2019, a total of 247 schools hosted 403 performances in the Company's DEP service territory, reaching approximately 86,879 students and spurring the distribution of 9,887 kits.

Once an eligible customer submits a completed energy efficiency, the Energy Efficiency Starter Kit is shipped for delivery within two to four weeks. To ensure customer satisfaction with the Energy Efficiency Starter Kit and the installation of items, customers receive an email reminder monthly after the kit delivery to encourage families to return their Business Reply Card (BRC) verifying installation of measures. Qualified households that submit their energy efficiency survey and return the BRC are automatically entered into the household contest drawing, sponsored by NTC.

Additionally, school and classroom contests encourage sign-ups, and NTC awards checks to schools whose students, along with their families, completed home energy surveys and received energy efficiency kits. In the fall and spring of each year, a drawing is held selecting one school and one household contest winner. Principals, teachers and students may view their school's progress and compare the number of sign-ups to other schools via the website, <a href="https://www.trackmysignups.org">www.trackmysignups.org</a>.

#### **Updates**

The Company continues to enhance the Program by the following:

- Introducing new productions each school year to refresh and refocus the materials and scripts to keep participating schools engaged.
- Promoting the program through social media to encourage awareness, recognition and participation.
- Partnering with Duke Energy Account and District Managers to leverage existing relationships in the community to develop positive media stories while encouraging kit sign ups.
- Offering teacher satisfaction survey evaluations after the performances for both the elementary and middle school shows. Average survey data from January through December indicated 95% of the Elementary teachers surveyed and 94% of Middle School teachers surveyed had very high satisfaction ratings.
- Enhancing the offering by providing additional materials for all student households, but particularly those that have already received the current Energy Efficiency Starter Kit as well as non-Duke Energy customer student households. Including non-Duke customer households increases customer satisfaction and provides additional energy savings impacts for all customers, but particularly those customers that would otherwise have been excluded from the kit offering.
- Inclusion of the Kilowatt Krush mobile gaming application that will allow users to learn about smart energy use and conservation through an engaging arcade of action-packed, energy themed

games. Students build and customize virtual houses in the neighborhood of their choice while learning about energy efficiency and safety education.

#### E. Marketing Strategy

The National Theatre for Children is responsible for all marketing campaigns and outreach. The marketing channels may include but are not limited to the following:

Direct mail (letters to school administrators)
Email
In-Person
Program Website
Events or assemblies
Printed materials for classrooms
Social media promotions

These marketing efforts engage students and their families in energy conservation behavior and provide energy saving opportunities through the Energy Efficiency Starter kits.

#### F. Evaluation, Measurement and Verification

The PY2017-2018 evaluation summary was presented at the Second Quarter Carolinas Collaborative. The DEP evaluation was combined with the DEC evaluation.

The evaluator verified impacts through engineering estimates. Participant surveys were also utilized to refine in-service rates, provide inputs into other algorithm variables, and help establish free ridership and spillover. The process evaluation helped uncover participants' program awareness, identify opportunities to improve program operations, and measure participants' satisfaction with measures provided through the kit.

High-level findings include:

- Energy kWh savings = 343.5; Summer kW = .041 kW; Winter kW = .064 kW
- NTG = .92; free ridership .13; SO .05

The Energy Efficient Lighting Program partners with lighting manufacturers and retailers across North and South Carolina to provide marked-down prices at the register to DEP customers purchasing energy efficient lighting products. Participation continues to be high, and the success of this Program can be attributed to high customer interest in energy efficiency, increased knowledge of the benefits associated with energy efficient lighting, and effective promotion of the Program.

As the Program moves into its tenth year, the Energy Efficient Lighting Program continues to incentivize customers to adopt a wide range of energy efficient lighting products, including LEDs and fixtures. Customer education is imperative to ensure customers are purchasing the right bulb for the application, to obtain high satisfaction with lighting products and to encourage subsequent purchases.

#### **Audience**

The Program is available to residential customers. Customers simply shop for their lighting needs at a wide variety of retail locations. Incentives are provided at the point of purchase.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	31,505	37,390	5,886
Savings (MW)	5.81	6.16	0.35
Participants		2,650,367	
2019 Program Expenses		\$13,417,185	

#### D. Qualitative Analysis

#### **Highlights**

In 2019, the Program incentivized a total of 2,650,367 measures, including 2,009,620 LEDs and 640,747 fixtures. The DEP Energy Efficiency Program had 17 lighting retail channels actively participating in 2019. While the top five retail channels account for 78% of the Program sales, all retail channels allow access to the Program for a diverse and geographically wide population of DEP customers. The Program is designed to reach 90% of customers within 30 miles of a participating retail location.

The Program continues to operate efficiently with 89% of overall Program costs going directly to customers in the form of incentives. Additionally, a total of 10% of the Program costs are spent on implementation and administration of the Program, including incentives and management fees. Therefore, only 1% is spent on marketing, labor and other costs.

#### Issues

No issues at this time.

#### **Potential Changes**

The Program will continue to evaluate the market and adjust products and incentive levels as necessary, focusing on specialty applications and strategically targeting underserved customers through select channels and events.

Exhibit 11 Page 14 of 64

#### E. Marketing Strategy

The Company will continue the Program marketing efforts in 2019 through the following:

- Point of Purchase materials at the participating retailer locations
- Duke Energy Progress and Program website
- General Awareness Campaigns
- Bill Inserts
- Email
- Online Advertising
- Direct mail

In addition, the program will have advertised events at key retailers that will include in store materials (fliers, bag stuffers, posters, banners, etc.). The program will also participate in community outreach events throughout the year (national night out, cultural events, etc.).

These marketing efforts are designed to create customer awareness of the Program, to educate customers on energy saving opportunities, and to emphasize the convenience of Program participation. Additionally, marketing efforts related to in-store events are designed to motivate customer participation.

#### F. Evaluation, Measurement and Verification

No evaluation activities occurred in 2019.

EnergyWise Home ("Program") allows Duke Energy Progress, LLC ("Company") to install load control switches at the customer's premise to remotely control the following residential appliances:

- Central air conditioning or electric heat pumps
- Auxiliary strip heat on central electric heat pumps (Western Region only)
- Electric water heaters (Western Region only)

For each of the appliance options above, Program participants receive an initial one-time bill credit of \$25 following the successful installation and testing of load control device(s) and an annual bill credit of \$25 in exchange for allowing the Company to control the listed appliances.

#### **Audience**

The Program is available to all of the Company's residential customers residing in owner-occupied or leased, single-family, or multi-family residences.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	N/A	N/A	N/A
Savings (MW)	418.15	422.12	3.97
Participants		422.12	
2019 Program Expenses		\$14,607,732	

<sup>1.</sup> MW Savings at the meter include Summer MW for AC participants and Winter MW for Heat Strip and Water Heater Participants

#### D. Qualitative Analysis

#### **Highlights**

After receiving regulatory approval from both the North Carolina Utilities Commission and the South Carolina Public Service Commission late in 2008, the Company officially launched the Program in April of 2009. Comverge, which specializes in integrated demand response solutions, was awarded the contract for the load management system software and switch technology, and GoodCents was awarded the contract for enrollment, field implementation, and call center support.

The program has met or exceeded its customer acquisition and impact goals every year since its inception. The program has achieved approximately 15% market penetration in nine years with over 196,000 participants and full shed load impacts of 405 MW summer and 16.6 MW winter at the meter.

#### **Smart Thermostat Introduction/Option**

On December 21, 2017 the company filed a modification to the current Load Control Rider LC-SUM to allow customer-owned smart thermostats to function as load control devices. This was approved by the NCUC on February 7, 2018 and the SCPSC on March 14, 2018. This option was made available December 15, 2019.

#### E. Marketing Strategy

The Company continues to deploy Program marketing efforts through various channels that include but are not limited to the following:

- Door-to-door canvassing
- Outbound calling
- Duke Energy Progress website
- Email
- Direct mail (letters and postcards to qualifying customers)

Additional detailed program information is located at <a href="https://www.duke-energy.com/home/products/energywise-home">https://www.duke-energy.com/home/products/energywise-home</a>

#### F. Evaluation, Measurement and Verification

EnergyWise Home completed a 2019 summer impact study using AMI data (for the first time) and traditional data loggers. The Final Evaluation Study is under review and is scheduled to be finalized in the first quarter of 2020.

Exhibit 11 Page 17 of 64

#### A. Description

The purpose of Income-Qualified Programs (Program) for DEP is to assist low income customers with installing energy efficiency measures in their homes that will help reduce their energy cost. There are two offerings currently in the Program:

- Neighborhood Energy Saver ("NES")
- Low-Income Weatherization Pay for Performance Pilot

#### Neighborhood Energy Savers

The purpose of Duke Energy Progress's ("DEP") Neighborhood Energy Saver program (the "Program") is to reduce energy usage through the direct installation of energy efficiency measures within the households of income-qualified residential customers. The Program utilizes Honeywell Building Solutions, which was awarded the contract through a competitive bid process, to (1) to identify appropriate energy conservation measures through an on-site energy assessment of the residence, (2) to install a comprehensive package of energy conservation measures at no cost to the customer, and (3) to provide one-on-one energy education. Program measures address end-uses in lighting, refrigeration, air infiltration and HVAC applications.

Program participants receive a free energy assessment of their homes followed by a recommendation of energy efficiency measures to be installed at no cost to the resident. A team of energy technicians install applicable measures and provide one-on-one energy education about each measure, emphasizing the benefit of each and recommending behavior changes to reduce and control energy usage. The goal is to serve a minimum of 4,500 households each year.

#### Pay for Performance

The Low-Income Weatherization Pay for Performance Pilot Program (Pilot) in Buncombe County North Carolina provides monetary incentives to local weatherization assistance providers and other non-profit organizations involved in weatherizing residential low-income households. Incentive payments is based on the kilowatt-hours (kWhs) saved from the additional Energy Efficiency (EE) measures installed. EE measures such as attic or wall insulation, air sealing, refrigerator replacement, lighting, or water measures could qualify for the incentives. The Pilot seeks to provide additional funding to weatherization assistance organizations that would allow them to extend EE more deeply into the projects they undertake. This is likely to include the deployment of additional EE measures that may or may not be covered by traditional weatherization assistance organizational funding, but it could also include weatherization of additional homes. The Pilot is proposed for a 36-month period and limited to dwellings in the Buncombe County area.

#### **Audience**

#### Neighborhood Energy Savers

The Program is designed for individually-metered residential homeowners and tenants within DEP. Implementation of the program is done in neighborhoods designated by DEP. Income-eligible neighborhoods must have at least 50% of households with income equal to or less than 200% of the poverty level set by the U.S. Department of Energy. Participants are only able to participate in the Program once.

#### Pay for Performance

Eligible participants will be selected by participating weatherization assistance and other non-profit organizations using current United States Department of Energy Low Income Home Energy Assistance Program grant requirements (must be less than 200% of the federal poverty guidelines, with the number

Exhibit 11 Page 18 of 64

of disabled, elderly, and minors in the household taken into consideration, as well as a high energy burden).

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	2,135	3,809	1,674
Savings (MW)	0.33	0.51	0.19
Participants		5,611	
2019 Program Expenses		\$1,695,018	

#### D. Qualitative Analysis

#### **Highlights**

Neighborhood Energy Savers

During 2019 the Program offered free walk-through energy assessments to 5 qualifying neighborhoods: Spring Lake NC, Dunn NC, Manning SC, Rockingham NC and Florence, SC. Neighborhood events included support from community groups and speakers such as elected officials, community leaders and community action agency representatives.

The program has been very successful and widely accepted by the eligible Duke Energy Progress customers. Nearly 70 percent of the eligible customers in the neighborhoods where the program has been offered have participated.

#### Pay for Performance

The Program received North Carolina Utility Commission approval on November 27, 2018. Since receiving approval two vendors have signed up to participate in the program. Community Action Opportunity signed a contract on January 28, 2019 and Green Built Alliance did the same on April 24, 2019. Initial orientation and startup went very well with both vendors and both vendors are regularly submitting invoices for incentive payments. Both vendors are enjoying participating in the program and also looking to increase their level of participation.

#### Issues

#### Neighborhood Energy Savers

The program continues to operate with minimal issues. The implementers are constantly striving to install the best quality measures and to use techniques that will motivate better customer behavior responses and participation.

#### Pay for Performance

The Program started off smoothly without any major issues. During the initial stages Green Built Alliance experienced challenges verifying client eligibility. Also, the measures they have been able to seek incentive payments for have been limited because of the skills of the mostly volunteer workforce they use. Otherwise there are no issues of concern.

#### **Potential Changes**

None at this time.

Exhibit 11 Page 19 of 64

### E. Marketing Strategy

Neighborhood Energy Savers

Current methods of marketing the program have been very successful in driving participation. The Company will continue the following marketing strategies in 2018:

Direct mail (letters and postcards to qualifying customers)
Secure local support from community leaders and organizations
Community outreach events
Publicized kickoff events
Door-to-door canvassing

These marketing efforts are designed to create customer awareness of the Program, educate customers on energy saving opportunities and emphasize the convenience of Program participation.

### F. Evaluation, Measurement and Verification

The process and impact evaluation report for the Neighborhood Energy Saver portion of the Program is scheduled for completion in the third quarter of 2019 upon the program's transition to LEDs. This will be a combined evaluation with DEC. No EM&V for Pay for Performance is planned at this time.

The Multifamily Energy Efficiency program ("Program") provides energy efficient lighting and water measures to reduce energy usage in multi-family properties. The Program allows Duke Energy Progress ("Company") to target multi-family apartment complexes with an alternative delivery channel. The measures are installed in permanent fixtures by Franklin Energy, the program administrator. Franklin Energy oversees all aspects of the Program including outreach, direct installations, and customer care.

The Program helps property managers save energy by offering energy efficient lighting and water products. The Program offers LED lighting measures including A-Lines, globes, candelabras, recessed, and track bulbs, and water measures such as bath and kitchen faucet aerators, water saving showerheads, and pipe wrap. Water measures are available to customers with electric water heating. These measures assist with reducing maintenance costs while improving tenant satisfaction by lowering energy bills.

The Program offers a direct install ("DI") service by Franklin Energy. Franklin Energy installs the lighting and water measures during scheduled visits. Crews carry tablets to keep track of which measures are installed in each apartment.

After the installation, Quality Assurance ("QA") inspections are conducted on 20 percent of the properties that completed installations in each month. The QA inspections are conducted by an independent third party. Any QA adjustments are provided to the Company to update participation records.

## **Audience**

The target audience is property managers who have properties served on an individually metered residential rate schedule. To receive water measures, apartments must have electric water heating.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	15,206	12,107	-3,099
Savings (MW)	2.13	1.62	-0.51
Participants		285,365	
2019 Program Expenses		\$2,151,724	

#### D. Qualitative Analysis

#### **Highlights**

Through December 2019, the Program completed installations at 112 properties, accounting for over 15,763 units. The Program installed 285,365 measures with lighting measures representing 71.3 percent of the total number of installations and water measures representing 28.7 percent. In 2019, the Program successfully added new lower flow bath aerators to help property managers meet green financing savings targets. In addition, the Program added 4,000 Kelvin LED bulbs to meet lighting color requests from property managers.

#### **Issues**

There are no issues to report.

#### **Potential Changes**

Program Management continues to evaluate new energy efficient measures for addition to the program.

New technology enhancements are being implemented to increase accuracy of recording measures installed, bulb wattages removed, increase efficiencies with scheduling units, and improved tracking of new opportunities from both the direct installers and energy advisors.

#### E. Marketing Strategy

As program implementer, Franklin Energy is responsible for marketing and outreach to property managers in the Company's service territory. Marketing is primarily done through outbound calls and on-site visits to gauge initial interest in the program. The Program also uses local apartment association memberships to obtain access to contact information for local properties and to attend association trade shows and events to promote the program. The Program was an exhibitor in the May 2019 AANC Conference in Raleigh, NC and generated over 50 leads for the region and 16 specific to DEP.

A Multi-Family Energy Efficiency public website landing page is available for property managers to learn more about the Program. A program brochure and a frequently asked question sheet are available for download.

Other ways a property manager may learn more about this Program are through the MyDuke Portal, an online tool used to pay the utility bills of vacant units at their property. The MyDuke Portal presents a promo link that directs the user to the Program website for more information.

Once enrolled, Franklin Energy provides property managers a variety of marketing tools to create awareness of the Program among their tenants. The tools include letters to each tenant informing them of what energy efficient measures are being installed and when the installations will take place. Tenants receive educational leave-behind brochures when the installation is complete.

Feedback from both property managers and tenants is important for the Program's continued success. Property managers are provided with leave-behind materials about the program which also includes survey for them to complete and return. For tenants, the educational leave-behind brochure includes a satisfaction survey to return to Duke Energy. Online versions of both the Program Manager and Tenant surveys are also available.

After the installation, window clings are placed in strategic areas throughout the property. Placement of the window clings at a minimum will be at the common areas entry and each residential building on site (to the extent applicable). Using the window clings ensures that the program and Duke Energy are recognized long after the installation has taken place.

#### F. Evaluation, Measurement and Verification

The combined DEC/DEP EM&V evaluation began in April of 2018. The evaluation will determine the net annual energy and demand associated with the program participants between January 1, 2017, and May 1, 2018. The evaluator will use a combination of surveys, on site data collection, a lighting logger study, and engineering analysis to determine the impacts for the program.

The evaluator ultimately determined that the initial logger deployment was not representative of the population during the sample period. As a result of the evaluators conclusions, loggers were redeployed to a new set of participants more representative of the population. Completion of updated impacts, which will include the new logger deployment results is scheduled for the first quarter of 2020.

Exhibit 11 Page 22 of 64

## **Appendix**

### **Tenant Post Installation Summary Report**

## Multifamily Energy Efficiency Program





## Thank You for Participating in the Duke Energy Multifamily Energy Efficiency Program!

Together with your neighbors, you helped Duke Energy provide and install energy-saving products in your home. Doing so is good for the environment AND your power bill!

As a result of your participation, the average unit could see energy savings of around **[\$XXX]** every year.\*

Our community could save **[XX]** kilowatt-hours annually, which is the environmental equivalent to planting **[XX]** trees or taking **[XX]** cars off the road!



Please take Duke Energy's survey by scanning this QR code:



\*Actual savings will vary by floor plan and usage @2019 Duke Energy Corporation

 $\Box$ 

#### **Program Brochure-**

Updated to add Commercial Offerings partnership nd new water measures

#### FAQ for Property Managers

What does the install process look like?

On your scheduled installation days, our team will arrive at 8.45 a.m. to begin working by 9 a.m. A member dry our staff will need to accompany our installars and handle keys throughout the installation process. The time spent in each unit varies depending on the layout and products being replaced. We will leave a flyer for each resident explaning what was installed and a survey providing an opportunity to give un feetbook. It's that simple and that fast!

How do we qualify?
Your property's electric utility must be Duke Energy to qualify. Additional qualifications depend on several factors such as metering, existing products, and method for water heating. To see which offerings your property qualifies for, you will need to schedule a complimentary energy assessment with one of our Energy Advisors by calling 888.297.1671 or emailing dukeenergymultifamilyeep@franklinenergy.com.

How much does it cost?

NOTHING! This program is part of many programs Duke Energy offers its customers from funds set aside to help reduce energy use. There are two parts to our program: residential findide teanst units) and commercial foommon areas There are no limits on how many products we can initial. Your Energy Advisor will go over your qualifications during the energy assessment.

What safety precautions should we know before installation?
As we are going through the units, if there are any unsecured pats or unattende micros, we will not be able to enter to perform the installation. During product installation, we ask that all small children be kept at a safe distance from the installers. The installers will provide further direction once on-site.

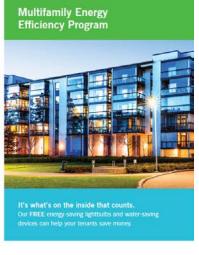
Call \$88.297.1671 or email dukeenergymultifamilyeep@franklinenergy.com to schedule an appointment for an energy assessment.



Phone Website 888.297.1671 duke-energy.com/multifamily











Multifamily Energy Efficiency Program
If you are a Duke Chergy customer, your tenants-may receive the following
renergy-saving products – histalled in each multifamily Lihit hind-qualifyibig
control divines at the Gold.



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Exit signstant-nepelsarly-to-spelprus'date. We'cook help you save on operating shift labor coded by replacing incandiabolint exit feigh builds with LEDs.

### See what other property managers had to say.

Yoù guys got top Glairks
"I received the satisfaction survey and filled it sait. You jug-y got top marks. I received a split of comprehens about his efficiently and professional you all liver. Thinks yoù ajoin for all that you did?"

- Ashieville-Property Manager

They were so polite and professional
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making they project run so smoothly. We and now officially arising
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- Rakright/Propertyl Makragor

## The program had been a fluge success land Very much appreciated

appreciated

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Use up to 35% less water thish traditional 2.2-gillions per-minole (gpm) fautets, which can reduce water and \$6Wif boots, isb Will isl this alridunt of elising saled to heat the water."

Outer ring allows for adjustable flow



Uhé up to 40% less water than traditional 2.5-gpm showerhebids; which deminded water and sever costs; as well as the amount of energy used to heat the water.



#### Hot Water Pipe Wrap



Reduces white and limergy use by preventing heat less while het world travers through your building's pipes.





Exhibit 11 Page 24 of 64

## Sorry We Missed You Door post-it



BUILDING A SMARTER ENERGY FUTURE ®

# Sorry We Missed You!

Today we stopped by to install your free energy-saving products, but

\_\_\_\_\_



Don't worry—you can still get your products! Simply contact your property manager to find out how.

Learn more at duke-energy.com/multifamily. Note that this program is administered by Franklin Energy, a contractor of Duke Energy with experience in the installation of home energy-saving products.

©2019 Duke Energy Corporation

#### **Property Manager Direct Mail Piece**



### Sign up today!

Phone 888.297.1671 Website duke-energy.com/multifamily Email dukeenergymultifamilyeep@franklinenergy.com



BUILDING A SMARTER ENERGY FUTURE®

Our **FREE** energy-saving lightbulbs and water-saving devices can help your tenants save money!



Address City, ST ZIP XXXXX

Use less energy, help your tenants save money and receive FREE products throughout your property by signing up for the Duke Energy Multifamily Energy Efficiency program. Your multifamily property can receive a FREE energy assessment, plus FREE energy-saving products installed in each unit and qualifying common areas – at no cost:

- Standard, globe, candelabra, recessed and track LEDs
   Bathroom and kitchen faucet aerators
   Exit-sign LEDs
   Showerheads

- Hot-water pipe wrapComparable assessments could cost \$1,000-\$3,000











©2019 Duke Energy Corporation

#### **Case Study**

#### MULTIFAMILY ENERGY EFFICIENCY PROGRAM CASE STUDY



#### ESTIMATED SAVINGS FOR RESIDENTS

Annual Electric Savings

Annual Electric Bill Savings

1.015 kWh

\$107

Value and Savings for Bell Partners and Its Residents Through 2018

Annual Electric Savings

Value of Products and Energy Savings

2,771,664 kWh

\$434.089

#### Going Green Makes a Difference

So far Bell Partners and Duke Energy have delivered energy savings equivalent to: Cars Taken Off the Road Trees Planted

314 37,653

### DUKE ENERGY AND BELL PARTNERS ARE GOING GREEN!

To date, Bell Partners and Duke Energy have collaborated to make nine communities more energy efficient by replacing standard lighting with LED bulbs, replacing inefficient faucets and showerheads with water-saving products, and insulating hot water heater pipes. The cost to Bell Partners and its residents? Nothing! In 2017 and 2018, Duke Energy provided and installed:

- · \$152,000 worth of energy-saving products
- · Over 26,000 LED lights
- · Nearly 5,600 water-saving faucet aerators
- · Over 1,800 energy-saving showerheads
- Nearly 14,000 feet of pipe insulation

Bell Partners residents can save an average of \$107 annually on their electric bill. The communities save ongoing 0&M expenses. And with the help of Duke Energy, Bell Partners continues to be a leader in the green multifamily market.



BUILDING A SMARTER ENERGY FUTURE®



Exhibit 11 Page 27 of 64

My Home Energy Report ("MyHER") helps Duke Energy Progress ("DEP") customers put their energy use in perspective with simple and easily understood graphics that compare customers' energy use with homes of similar size, age and heating source. The reports motivate customers to change their behaviors and reduce their consumption by presenting them with timely tips and program offers.

My Home Energy Report Interactive links customers to a portal where they can complete a home profile, set savings goals and track their progress, get answers to their personal energy questions from an energy expert, and share their energy saving tips with other customers. Customers can also see how much electricity they might use in the coming months based on their usage history.

#### **Audience**

Program participants are identified through demographic information and must reside in an individually-metered, single-family residence served on a residential rate schedule and must have at least 13 months of electric usage with the Company. These customers receive up to 8 paper reports per year. Electronic versions of the report are distributed 12 times a year for customers who have enrolled in My Home Energy Report Interactive and/or who have a registered email address with the Company.

Customers who live in an individually-metered, multi-family dwelling served on a residential rate schedule and who have at least 13 months of electric usage with the Company may also participate. Multi-family customers who have registered their email address with the Company receive 4 printed reports and 12 electronic reports throughout the year. Multi-family customers without a registered email address with the Company receive 6 printed reports throughout the year with a strong call to action to provide their email address to receive more energy efficiency tips and information through additional reports delivered.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	119,273	154,602	35,329
Savings (MW)	20.01	54.25	34.24
Participants		769,490	
2019 Program Expenses		\$6,746,551	

#### D. Qualitative Analysis

As of December 31, 2019, over 702,000 DEP single-family customers and 67,000 multifamily customers were receiving the MyHER, and over 52,600 DEP single-family customers and over 3,700 multifamily customers were enrolled in the MyHER Interactive portal.

#### **Highlights**

In 2019, the program launched into the Duke Energy Mobile App. Participants in the MyHER program are now able to see their usage comparison and disaggregation in the mobile app. With the deployment of AMI meters throughout DEP, the program began sending AMI data to Tendril. Customers with AMI meters can see their interval energy usage on the MyHER interactive experience. In 2019, the program also launched new AMI usage charts on the eHERs which show customers the difference in average weekly usage by hour from one month to the next.

#### E. Marketing Strategy

Since the MyHER paper report is an opt-out program, customers who meet the eligibility requirements automatically receive the report. Less than 0.04% of single-family customers and .03% of multi-family chose to opt out. The MyHER Interactive portal is an opt-in portal. Marketing for the portal includes

email campaigns and messages in the paper report and on its envelope.

In 2019, the program launched several email and on-report marketing campaigns to further awareness of the interactive portal. These campaigns resulted in an increase of over 26,800 customers enrolling in the interactive portal.

#### F. Evaluation, Measurement and Verification

The process and impact evaluation report, combined with DEC, was completed and presented to the Carolinas Collaborative in the Second Quarter 2019.

As is typical with MyHER evaluations, the impact evaluation consisted of a billing analysis to determine the consumption differences between the treatment group and the control group. A summary of results included verified impacts of 201 kWh per participant. Due to the nature of the evaluation methodology, these impacts are inherently net impacts.

For the process evaluation, recommendations and opportunity areas included continuing the practice of simultaneous control and treatment assignment, limited to once or twice per year; continuing to increase awareness of MyHER Interactive; keeping an eye on effective change management; and to continue prioritizing the structuring of the program processes and schedules

Exhibit 11 Page 30 of 64

#### A. Description

The Non-Residential Smart \$aver Program ("Program") provides incentives to Duke Energy Progress, LLC's ("DEP" or the "Company") commercial and industrial customers to install high efficiency equipment in applications involving new construction and retrofits and to replace failed equipment.

Commercial and industrial customers can have significant energy consumption but may lack knowledge and understanding of the benefits of high efficiency alternatives. The Program provides financial incentives to reduce the cost differential between standard and high efficiency equipment so that customers see a quicker return on their investments into high efficiency equipment and so that the money they save on utility bills can be reinvested in their businesses. Incentives are determined based on the Company's modeling of cost effectiveness over the life of the measure. In addition, the Program encourages dealers and distributors (or market providers) to stock and provide these high efficiency alternatives to meet increased demand for the products.

The Program provides incentives through prescriptive measures, custom measures and assessment/technical assistance.

#### Prescriptive Measures:

Customers receive incentive payments after they install certain high efficiency equipment from the list of pre-defined measures, including lighting; heating, ventilating and air conditioning equipment; and refrigeration measures and equipment. A list of eligible equipment and measures and specific incentive amounts are available at the Program website: <a href="https://www.duke-energy.com/business/products/smartsaver">https://www.duke-energy.com/business/products/smartsaver</a>.

#### **Custom Measures:**

The Smart \$aver Custom Program is designed for customers with electrical energy-saving projects involving more complicated or alternative technologies or measures not covered by the Non-Residential Smart \$aver Prescriptive Program. The intent of the Program is to encourage the implementation of energy efficiency projects that would not otherwise be completed without the Company's technical or financial assistance.

Unlike the Non-Residential Smart \$aver Prescriptive Program, the custom program requires pre-approval prior to the project initiation. Proposed energy efficiency measures may be eligible for customer incentives if they clearly reduce electrical consumption and/or demand.

The two approaches for applying for incentives for this Program are Classic Custom and Smart \$aver Tools. Each approach has a method by which energy savings are calculated, but the documents required as part of the application process vary slightly between the two.

Currently the application forms listed below are located on the Company's website under the Smart \$aver® Incentives (Business and Large Business tabs).

- Custom Application, offered in word and pdf format.
- Energy savings calculation support:
- Classic Custom excel spreadsheet approach (> 700,000 kWh or no applicable Smart \$aver Tool)
- Lighting worksheet (excel)
- Variable Speed Drive (VFD) worksheet (excel)
- Compressed Air worksheet (excel)
- Energy Management System (EMS) worksheet (excel)
- General worksheet (excel), to be used for projects not addressed by or not easily submitted using one of the other worksheets
- Smart \$aver Tools approach (< 700,000 kWh )</li>
- HVAC & Energy Management Systems
- Lighting (no project size limit)
- Process VFDs
- Compressed Air

Exhibit 11 Page 31 of 64

Energy Assessments and Design Assistance:

Incentives are available to assist customers with energy studies such as energy audits, retro commissioning, and system-specific energy audits for existing buildings and with design assistance such as energy modeling for new construction. Customers may use a contracted Duke Energy vendor to perform the work or they may select their own vendor. Additionally, the Program assists customers who identify measures that may qualify for Smart \$aver Incentives with their applications. Pre-approval is required.

The Company contracts with AESC to perform technical reviews of applications. All other Program implementation and analysis is performed by Duke Energy employees or direct contractors.

#### **Audience**

This Program is designed for all of the Company's non-residential customers billed on an eligible Duke Energy Progress rate schedule.

#### **B & C. Impacts, Participants and Expenses**

**Energy Efficiency for Business – Total Program** 

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	62,353	68,173	5,820
Savings (MW)	8.92	13.33	4.41
Participants		1,696,453	
2019 Program Expenses		\$10,718,176	

**Custom Measures Only** 

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	13,879	13,130	-749
Savings (MW)	1.58	3.12	1.54
Participants		10,996	
2019 Program Expenses		\$2,769,305	

**Prescriptive Measures** 

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	48,474	55,043	6,569
Savings (MW)	7.34	10	2.87
Participants		1,685,457	
2019 Program Expenses		\$7,948,870	

## D. Qualitative Analysis

#### **Highlights**

The prescriptive, custom, and assessment/technical assistance programs continue to generate substantial savings and customer satisfaction by leveraging internal staff focused on providing solutions to participants. Prescriptive measures foster high-volume participation for common retrofit projects, while custom programs seek ways to provide in-depth technical expertise required to bring in larger and more unique projects.

Exhibit 11 Page 32 of 64

Over the years, the Program has worked closely with Trade Allies (TAs), which are energy-efficiency equipment vendors, contractors, engineers, architects and energy services providers in the Carolinas registered with the Program, to promote incentives to our business customers at the critical point in time when customers are considering standard or high efficiency equipment options. The Smart \$aver® outreach team builds and maintains relationships with TAs in and around Duke Energy's service territory. Existing relationships continue to be cultivated while recruiting new TAs remains a focus. Duke Energy's efforts to engage TAs include the following activities:

- Trade Ally Search tool located on the Smart \$aver® website
- Inspections of a sample of all projects to ensure quality control
- TA co-marketing including information about the Smart \$aver Program in the TAs marketing efforts
- Online application portal training and support
- Midstream channel support
- TA year-end awards
- TA quarterly newsletter
- Technology- and segment-specific marketing collateral
- TA discussion group (20 trade allies that give input on the Program)
- TA training
- Sponsorship of TA events
- Online collateral toolkit for access to marketing materials

The TA outreach team educates TAs on the Program rules and the Smart \$aver Program expectations for TA conduct. The Company engages the TAs in promoting the Program as well as targeting TAs more effectively based on market opportunities.

The Program has developed multiple approaches to reaching a broad and diverse audience of business customers through incentive payment applications, paper and online options, and instant incentives offered through the midstream marketing channel and the online energy savings store. The Company continues to consider ways to expand participation through new channels that offer instant incentives thus reducing the price of energy efficient products at the time of purchase and reducing or eliminating the need for a separate incentive application. 2019 YTD program trends are listed below:. The 2019 results include:

- Customers continue to show high interest in energy efficiency and had significant funds to invest when rebates offset a portion of the cost. The program activity in 2019 exceeded target by 114%.
- Midstream marketing channel continues to gain popularity and attract more distributors to the program.
- More applicants are using the online application, an easier way to apply
- Outreach continued to support TAs working with the Program
- Targeted marketing reached out to customers and TAs
- A dedicated team of customer service representatives answered customer questions via phone and email
- Large account managers and business energy advisors developed personal relationships with large and medium businesses and were able to identify and support new EE projects

Customers have several options to participate in the Prescriptive measures offered by the Program. The following chart summarizes 2019 participating customers by Program channel:

Prescriptive Program Option	Participating Customers*	% 2019 Repeat Customer
Paper and Online Application Form	554	57%
Midstream Marketing Channel	1,113	62%
Online Energy Savings Store	562	64%
Multifamily Free Channel	26	88%

<sup>\*</sup>May include multiple facilities/sites for one customer.

During 2019, 1,265 applications, consisting of 2,803 measures, were paid for Duke Energy Progress

Exhibit 11 Page 33 of 64

prescriptive measures. New application activity increased during the second half of 2019. 70% of 2019 applications were submitted via the online application portal, which is a 9% increase over 2018. The average payment paid per application was \$2,361. Duke Energy utilizes an internal database that allows the Program to self-administer applications and track data.

Many TAs participating in the application process reduce the customer's invoice by the amount of the Smart \$aver® Prescriptive incentive and then receive reimbursement from DEP. Customers often prefer this approach rather than paying the full cost of equipment upfront and receiving an incentive check from DEP later.

The midstream marketing channel provides instant prescriptive incentives to eligible customers at a participating distributor's point of sale. Approved midstream distributors validate eligible customers and the lighting, HVAC, food service and IT products they selected to purchase through an online portal and use that information to show customers the reduced price of high efficiency equipment. Upon purchase, the distributor reduces the customer's invoice for the eligible equipment by the amount of the prescriptive incentive. Distributors then provide the sales information to DEP electronically for reimbursement. The incentives offered through the midstream channel are consistent with current Program incentive levels.

Energy Solutions provides the online portal for distributors to manage the paperless validation and incentive application. During 2019, approximately 46% of total Smart \$aver Prescriptive incentives were paid through the midstream marketing channel. Duke Energy currently has 272 distributors signed up for the midstream channel, an increase of 14% from 2018.

The Duke Energy Business Savings Store on the Duke Energy website uses EFI, a the third-party that fulfills orders directly for the customers. The site gives customers the opportunity to take advantage of a limited number of prescriptive measure incentives by purchasing products from the on-line store at a purchase price reduced by the amount of the incentive. The discounts in the store are consistent with current incentive levels. Through an emphasis on focused marketing and increased customer interest, the Business Savings Store experienced significant growth in participation in 2019, quadrupling the number or participating customers versus 2018.

In order to grow the number of accounts participating in EE, particularly in market segments where knowledge of EE is limited, the Program is now collaborating with the Residential Multifamily Direct Install program to offer free low-cost measures to multifamily common areas as well as tenant spaces. Multifamily properties that are being approached by the Residential Multifamily program's vendor, Franklin Energy, are now eligible to add on limited quantities of common area measures. The common area must be on an eligible commercial rate to participate. Measures such as LED screw-in lamps, LED exit signs, low flow shower heads, faucet aerators and pipe insulation are now being installed where possible in multifamily common areas as well as in residential spaces. For those properties that accept the measures, Franklin Energy will directly install them in the common areas when they are on site for the residential installations. Franklin Energy tracks the measures installed by property, as well as total installations and reports this information to the Program team. This channel began earlier this year, additional channels may be developed in the future to distribute free measures.

Smart \$aver Custom Incentives program uses a flat rate incentive for both energy and demand savings.

As of the end of 2019, Custom-to-Go was retired and replaced with the Smart Saver Tool. For the lighting tool only, the customer is able to submit one file for both Prescriptive and Custom reducing some of the customer's administrative burden. To date we have received eight combined lighting applications for DEP.

#### Issues

In the last few years, the combination of the Program's incentives and the falling prices for LED equipment has been very attractive for customers and many have taken advantage of the opportunity to

invest in LED upgrades. While there is still significant opportunity for high efficiency lighting, the excitement around LEDs has taken customers' attention away from EE opportunities outside of lighting. The Program has continued to promote non-lighting EE and encourage customers to go beyond lighting for efficiency projects. The Company continues to work with outside consultants and internal resources to develop strategies to understand equipment supply/value chains and increase awareness of these measures going forward.

The Smart \$aver Custom Program application process is considered burdensome by some customers due to the individual and technically intensive review all projects applying for custom incentives requires. Each year, the Program works to reduce the length of the application process, and the current process takes 19 days for all states/jurisdictions as a result.

The technical review often requires customers (or their vendors) to quantify the projected energy savings from the proposed project, a lengthy process that may require engineering expertise. Where necessary, this requirement will continue, thus ensuring that incentives are being paid for cost-effective verifiable efficiency gains. However, the Custom-to-Go suite and the online application portal have relieved some of this burden.

The custom program is subject to large fluctuations in performance due to the importance of a small number of large projects. Although the number of small projects is significant compared to the number of large projects, the large projects drive the majority of annual impacts.

Custom program performance remains limited by customers who are opted out of the EE Rider. Those customers are not eligible to participate, and any projects they may have completed are considered lost opportunities. The custom program is actively working with internal resources (large account managers and business energy advisors) to evaluate whether opting in to the EE Rider for a potential project is the best option for customers currently opted out.

Finally, the custom program continues to see changes in available technologies as specific measures become eligible for Smart \$aver Prescriptive.

#### **Potential Changes**

Standards continue to change and new, more efficient technologies continue to emerge in the market. DEP periodically reviews major changes to baselines, standards, and the market for equipment that qualifies for existing measures and explores opportunities to add measures to the approved Program for a broader suite of options. This work is underway now, and there are expected to be changes announced for a limited number of new measures and measure updates. These changes likely fall under the flexibility guidelines and not require regulatory approvals. When existing measures change, such as when a measure is removed or an incentive amount is reduced, customers have a 90-day grace period to apply for the past measure or incentive amount.

DEP is also considering new and innovative ways to reach out to customer segments that have had a lower rate of prescriptive incentive applications and considering options to partner with other DEP EE programs to cover gaps in the market and ultimately, make it easier for customers to participate in Smart \$aver incentives.

#### E. Marketing Strategy

Nonresidential customers learn of programs via targeted marketing material and communications. The 2019 marketing plan included direct marketing such as email and direct mail, online marketing, print marketing and supporting partnerships. The marketing team has selected a highlighted topic for each month and promotes coordinated communication around that topic.

The internal marketing channel consists of assigned Large Business Account Managers, small and medium Business Energy Advisors, and Local Government and Community Relations, who all identify potential opportunities as well as distribute program informational material to customers and Trade Allies. Duke Energy has two Business Energy Advisors in the Carolinas area to perform outreach to unassigned small and medium business customers. The Business Energy Advisors follow up on customer leads, assist with program questions, and steer customers who are not already working with a trade ally to the trade ally search tool. In

Exhibit 11 Page 35 of 64

addition, the Business Energy Advisors contact customers with revenue between \$60,000 and \$250,000 to promote the Smart \$aver® programs.

The Economic and Business Development groups also provide a channel to customers who are new to the service territory.

A table listing the marketing campaigns during 2019, with some samples of marketing graphics, are included as an appendix. These marketing efforts are designed to create awareness of the Program, to educate customers on energy saving opportunities, and to emphasize the convenience of Program participation.

The Program launched a new marketing channel in 2017 called New Construction Energy Efficiency Design Assistance (NCEEDA) to identify projects for customers currently underserved in the small and medium business market. This channel utilizes the vendor Willdan Energy Solutions to help find those opportunities, complete savings calculations as well as submit applications for the customer. As of January 24, 2020, 160 active and completed projects have enrolled in the DEP - NCEEDA offering, representing 21.8 million square feet of new construction along with 127 Smart \$aver Custom project applications representing 38 million kilowatt hours of energy savings.

#### F. Evaluation, Measurement and Verification

#### Non-Residential Smart \$aver Prescriptive Program

The combined DEC/DEP process and impact evaluation for the Non-Residential Smart\$aver® Prescriptive Incentive program for the period of March 2017 through December 2018 began the first quarter of 2019.

A process evaluation to determine free ridership and spillover will be conducted. The process evaluation will include interviews with program management. Main Channel Customer, Midstream Customer and Trade Ally surveys will be conducted to assess program awareness, satisfaction and installation decisions. Program materials will also be reviewed to fully understand the specifics of the program design.

The impact evaluation will mostly consist of engineering desk reviews as well as on site metering for a subset of lighting measures. An online survey with Midstream lighting customers will be performed to verify purchase and installation of lighting measures. Program supplied tracking databases, project documentation and Technical Reference Manuals from Ohio and neighboring states will also be used to estimate verified energy and demand savings for the Smart \$aver Prescriptive program.

The final report is scheduled for the first quarter of 2020.

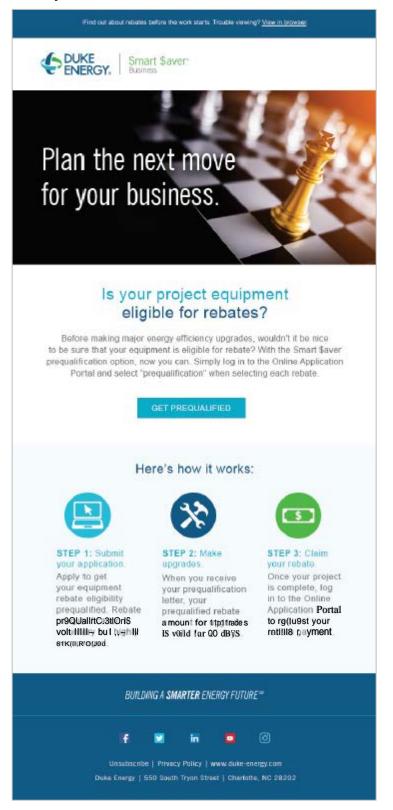
#### Non-Residential Smart \$aver Custom Program

No evaluation activities occurred in 2019, however evaluation activities will commence in the first quarter of 2020. A final report, combined with DEC, is tentatively planned for the second guarter of 2021.

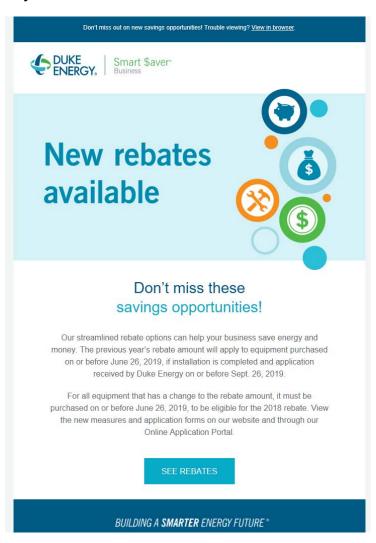
# Appendix: Marketing schedule and examples

Month	Channel	Audience	Incentives Highlighted
January	Email	All Business Customers	Pre-Qualification (All Measures Categories)
February	Email	SMB, BEA (DEC/DEP)	Past Participants (HVAC, Commercial Equipment, Industrial Equipment, Agriculture)
May	Email	All Business Customers*	New Rebate Measures (All Measures Categories)
May	Paid Advertising (digital, paid social, video)	All Business Customers	All Measures Categories
June	Paid Advertising (digital, paid social, video)	All Business Customers	All Measures Categories
July	Email	All Business Customers	Lighting & Lighting Controls
July	Email	All Business Customers	Wastewater
July	Paid Advertising (digital, paid social, video)	All Business Customers	All Measures Categories
August	Paid Advertising (digital, paid social, video)	All Business Customers	All Measures Categories
August	Email	All Business Customers	Lighting
September	Paid Advertising (digital, paid social, video)	All Business Customers	All Measures Categories
September	Email	All Business Customers	HVAC
October	Email	All Business Customers	All Measure Categories/ Co-Marketing with Savings Store

# January Pre-Qualification - Email



# May New Rebate Measures - Email



# June Paid Advertising - Social

Birds Video



Happy Video



Logo Happy Video



Cash Fan Image

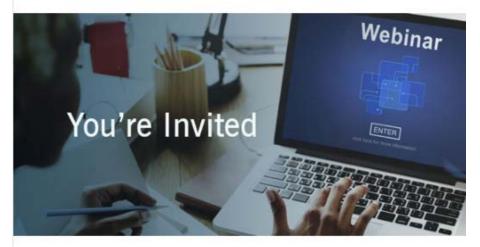


# Icon Image



# October HVAC Webinar - Email





# Join us for an educational session about commercial heating, ventilation and air conditioning (HVAC).

Learn about commercial HVAC systems and how to make them more energy efficient as we focus on design principles and considerations, various systems and control types, energy conservation measures (ECMs) and more.

Plus, you'll learn about ways Duke Energy can help your facility save more money and energy through our Smart \$aver\* program.

# WHEN:

Tuesday, October 29, 2019 10 a.m. to 11 a.m. ET

REGISTER NOW



# A. Description

Duke Energy Progress, LLC's (the "Company") Non-Residential SmartSaver® Performance Incentives (the "Program") offers financial assistance to qualifying commercial, industrial and institutional customers to enhance their ability to adopt and install cost-effective electrical energy efficiency projects.

The Program encourages the installation of new high efficiency equipment in new and existing nonresidential establishments as well as efficiency-related repair activities designed to maintain or enhance efficiency levels in currently installed equipment. The Program provides incentive payments to offset a portion of the higher cost of energy efficient installations that are not eligible under either the Smart \$aver® Prescriptive or Custom programs. The types of projects covered by the Program include projects with some combination of unknown building conditions or system constraints, or uncertain operating, occupancy, or production schedules. The specific measures incentivized are stated in the agreement with the customer. The Program coordinates closely with the existing custom program team and shares resources for administrative review and payment processing. The Program requires preapproval prior to project initiation. Only projects that demonstrate that they clearly reduce electrical consumption and/or demand are eligible for incentives.

The intent of the Program is to broaden participation in non-residential efficiency programs by being able to provide incentives for projects that previously were deemed too unpredictable to calculate an acceptably accurate savings amount, and therefore ineligible for incentives. This Program provides a platform to understand new technologies better.

The key difference between the Performance Incentive Program and the custom program is that the performance incentive customers get paid based on actual measure performance. A plan is developed to verify actual performance of the project upon completion and is the basis for the performance portion of the incentive.

The incentive is typically paid out on the following schedule, though the quantity & timing of payment installments may vary:

- Incentive #1: For the portion of savings that are expected to be achieved with a high degree of confidence, an initial incentive is paid once the installation is complete.
- Incentive #2: After actual performance is measured and verified, the performance-based part of the incentive is paid. The amount of the payout is tied directly to the savings achieved by the measures.

The Company contracts with Alternative Energy Systems Consulting, Inc. (AESC) to perform technical review of the applications. All other program implementation is performed by Duke Energy employees or direct contractors.

#### **Audience**

All of the Company's non-residential electric accounts billed on qualifying rate schedules are eligible, except accounts that are opted out of the rider.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	6,577	1,357	-5,220
Savings (MW)	0.75	0.10	-0.65
Participants		62	
2019 Program Expenses		\$269,460	

Exhibit 11 Page 42 of 64

#### D. Qualitative Analysis

#### **Highlights**

As new technologies are introduced and changes occur in the energy efficiency marketplace, performance incentives are the perfect tool to influence and reward customers who invest in energy efficiency. The Smart \$aver Performance Incentives program was launched on January 1, 2017. Efforts to encourage internal resources, trade allies and vendors who sell energy efficient equipment to promote the Program and assist customers to participate are continuous and on-going. In addition, the Program is marketed closely with the Smart \$aver Custom Program.

In DEP, the program is beginning to reap the fruits of its marketing efforts as program participation increases slightly. In 2019 the program received 3 new applications, all from NC.

The program experiences large fluctuations in performance due to long project lead times, long monitoring and verification times, and the timing and sizes of projects. With a compelling value proposition and internal resources and trade allies getting comfortable with this unique program offering, participation is expected to continue to be strong.

The program is now able to offer both top and bottom cycle CHP to customers.

#### Issues

Program management is monitoring a few areas.

- The preferred method for measurement and verification of performance is gathering, monitoring and analyzing customer billing history. However, energy savings are not significant enough at times to evaluate effectively through the review of billing information. If this is the case, sub-metering is required at the customer's expense and may be a hurdle due to the time and expense of monitoring and verifying savings.
- The Performance program cannot be offered to customers who are opted out of the EE Rider.
   Performance projects can easily carryover into multiple calendar years because of the monitoring and verification requirement, a situation which could make opting in more difficult to justify.
- Sometimes project M&V can span multiple years thus requiring a customer to be opted-in for multiple years. This is often not preferred and we are beginning to see customers forfeit a portion of their project incentive to opt-out of the rider.
- o Customers may not participate because of the risk of measured energy savings being less than expected and resulting in a smaller incentive payout.
- The program is having difficulty in finding cost effective projects. Typical Performance project with uncertainty in savings have been controls related, where savings are determined based on the part-load characteristics of the measure or system optimization. These types of projects typically have the following characteristics which makes costs-effectiveness challenging:
  - High first costs
  - o Little demand savings low avoided costs
  - Low measure life

The program will continue to evaluate projects on a case by case basis to ensure cost effective projects are incentivized.

Exhibit 11 Page 43 of 64

The Company will continuously consider functional enhancements to enhance participation, processing speed, and program efficiency.

# E. Marketing Strategy

The 2020 marketing strategy for the Smart \$aver Performance Incentive Program aligned closely with the Custom Program. The goal is to educate non-residential customers about the technologies incentivized through both programs, as well as the benefits of installing energy-efficient equipment. These efforts utilize a multi-channel approach, which includes the following:

- o Email
- Direct Mail (letters to qualifying customers)
- o Duke Energy Progress website
- Webinars
- o Small Business Group outreach events
- Paid advertising/mass media
- Industry Associations
- Large Account Managers
- Business Energy Advisors
- Trade Ally Outreach

These marketing efforts are designed to create awareness of the Program, to educate customers on energy saving opportunities, and to emphasize the convenience of participating.

Non-residential customers are informed of programs via targeted marketing material and communications. Information about incentives is also distributed to trade allies, who in turn sell equipment and services to all sizes of non-residential customers. Large business or assigned accounts are targeted primarily through assigned Company account managers. Unassigned small to medium business customers are supported by the Company's business energy advisors. The business energy advisors follow up on customer leads to answer questions and steer customers who are not already working with a trade ally to the trade ally search tool. In addition, the business energy advisors contact customers with electrical costs between \$60,000 and \$250,000 to promote the Non-Residential Smart \$aver Program.

The internal marketing channel is comprised of assigned Large Business Account Managers, Business Energy Advisors, and Local Government and Community Relations who all identify potential opportunities as well as distribute program collateral and informational material to customers and trade allies. In addition, the Economic and Business Development groups also provide a channel to customers who are new to the service territory.

#### F. Evaluation, Measurement and Verification

No evaluation activities occurred in 2019. Future evaluation timing will depend upon sufficient participation and may be included in future Smart \$aver Non-Residential evaluations.

#### A. Description

The purpose of this Program is to offer customers a variety of energy conservation measures that increase energy efficiency in existing residential dwellings. The Program utilizes a network of participating contractors to do the following: (1) to encourage the installation of high efficiency central air conditioning (AC) and heat pump systems with an optional add on measure such as Smart Thermostats, (2) to encourage attic insulation and sealing, (3) to encourage the installation of heat pump water heaters, and (4) to encourage high efficiency variable speed pool pumps.

Incentives are only applicable to measures installed by a contractor approved by Company

Duke Energy contracts with a third-party vendor for application processing, incentive payment disbursement, and customer/contractor support.

#### **Audience**

The Program is available to customers whose premise is at least one year old, who are served on a residential rate, and who meet the service delivery qualifications.

## B & C. Impacts, Participants and Expenses

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	4,184	6,756	2,572
Savings (MW)	1.11	1.86	0.75
Participants		21,965	
2019 Program Expenses		\$6,397,527	

#### D. Qualitative Analysis

## **Highlights**

The Program's tiered incentive structure continues to receive a positive reaction from customers as well as Trade Allies. Reporting continues to show that the increased incentive amounts for higher SEER equipment has encouraged customers to have higher efficiency equipment installed properly and managed well.

The Referral Channel, which provides free, trusted referrals to customers who are trying to find reliable qualified contractors, has successfully generated roughly 21,000 customer referrals through 2018 exceeding the total number of referrals generated in all of 2017. Customers whose referral generates a sale for the Trade Ally were asked to rate their experience with the Referral Channel. The Referral Channel has improved their star rating from a 4.68 to 4.88 out of 5 stars during 2018. The program also continued to see a reduction in the incremental cost to the customer across all measures which was noted in the previous filing which was approved on February 25 ,2019. Additionally, the program staff is working on potential modifications to further improve cost effectiveness of the program for 2019 and beyond.

#### Issues

The participation of the Trade Ally network is vital to the success of the Program. The Program continues to try and shift the market away from some of the more commonly utilized practices which rely heavily on decentralized training and varying knowledge levels; imprecise, manual field calculations. Instead, the Program encourages Trade Allies to train and certify technicians to use quality diagnostic instruments and processes. The Company has not seen significant acceptance with the diagnostic-based measures because of the need for

Exhibit 11 Page 45 of 64

expensive equipment, the need to obtain additional industry certifications and to alter current business practices. Historically, any additional cost associated with diagnostic readings, training or equipment purchases seem to be passed on to the customer and not absorbed thorough the companies offering as an added benefit. The program will continue to place emphasis on these best practices and continue offering additional training to the Trade Allies and modifications to program requirements when needed to build support.

# E. Marketing Strategy

Promotion of the Program is primarily targeted to HVAC and home performance contractors. Trade Allies are integral to the Program's success because they interface with the customer during the decision-making event.

Program information and Trade Ally enrollment links are available on the Program's website to educate customers about the Program and encourage participation. By increasing the overall awareness of the Program and the participation of Trade Allies, more customers will consider the benefits of the Program at time of purchase.

Based on numerous customer engagement surveys and focus groups, the Program rebranded the referral channel, currently known as "Find It Duke," in March of 2018 with the intent of positioning Duke Energy as a trusted advisor for customers who are making energy related home improvements. Various customer marketing campaigns during 2018 leveraged channels such as direct mail, TV, radio, and email messaging in order to build awareness of the referral service. Other marketing efforts, such as a paid search and co-branded special offer campaigns with eligible referral contractors, manufacturers, and national retailers, also created awareness for the channel.

#### F. Evaluation, Measurement and Verification

No evaluation activities were completed in 2019. The next evaluation for the program will commence in second quarter of 2021 with a completed report scheduled for Second Quarter 2022.

#### A. Description

The Home Energy House Call Program ("Program") is offered under the Energy Assessment Program where Duke Energy Progress, LLC ("Company") partners with several key vendors to administer the Program.

The Program provides a free in-home assessment performed by an energy specialist certified by the Building Performance Institute ("BPI"). The BPI-certified energy specialist completes a 60- to 90-minute walk through of a customer's home and analyzes energy usage to identify energy savings opportunities. The energy specialist discusses behavioral and equipment modifications that use less energy. The customer also receives a customized report identifying actions the customer can take to increase their home's efficiency. The following are examples of recommendations that might be included in the report:

Turn off vampire load equipment when not in use.

Use energy efficient lighting.

Use a programmable thermostat to manage heating and cooling usage.

Replace old equipment.

Add insulation and seal the home.

In addition to a customized report, customers receive an energy efficiency starter kit with a variety of measures that can be directly installed by the energy specialist. The kit includes measures such as energy efficient lighting, a shower head, faucet aerators, outlet/switch gaskets, weather stripping and a booklet of energy saving tips.

## **Audience**

Residential customers that own a single-family residence with central air, electric heat or an electric water heater and that have at least four months of billing history are eligible to participate in the Program.

# **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	2,565	7,834	5,269
Savings (MW)	0.43	0.94	0.51
Participants		41,226	
2019 Program Expenses		\$2,109,106	

#### D. Qualitative Analysis Highlights

The program conducted 6,727 assessments and installed 28,533 additional LEDs in 2019. The program additionally installed 3,919 feet of pipe insulation and 2,047 additional bathroom aerators. The program continues to focus on maximizing measures installed as well as cross promoting other Duke Energy programs and offerings.

#### **Issues**

The program continues to coordinate closely with the vendor to monitor incoming demand, to balance marketing and to ensure adequate appointment slots are available.

#### **Potential Changes**

- Continuing to optimize the online scheduling tool to enhance the customer experience
- Evaluation of upgradeable measures in field such as hand-held showerheads, smart thermostats, specialty bulbs, blower door option.
- Implementing post audit follow up with reminders of recommendations/referrals

Currently, Program implementers are evaluating the need for a plan to obtain customer feedback

proactively and identify improvement or EM&V opportunities.

#### E. Marketing Strategy

The Program continued to use a multichannel marketing approach including targeted mailings to prequalified residential customers, bill inserts, online promotions and online video. Examples of online messages, bill inserts and direct mail promotions are available in the appendix. For those who elect to receive offers electronically, email marketing is used to supplement direct mail. In between larger initiatives, such as bill inserts, the program utilizes direct mail which can easily be modified based on demand. Core messaging is simple and focuses on key benefits (a free energy assessment from Duke Energy can help save energy and money while also increasing comfort) and three easy steps (you call, we come over, you save).

Home Energy House Call program information and an online assessment request form are available at <a href="https://www.duke-energy.com">www.duke-energy.com</a>.

# F. Evaluation, Measurement and Verification

The next evaluation for the program, a combined evaluation with DEC and DEP, is tentatively scheduled for a late fourth quarter 2021 delivery date. It is anticipated that the evaluation will consist of a billing analysis that will compare the consumption of program participants to future program participants. Engineering estimates for the HEHC kit measures will also be conducted to provide insight into the behavioral impacts achieved through the program and to provide impacts for the Additional Bulbs and other optional measures provided to program participants. Participants surveys will be used to determine in-service rates and determine free ridership at the measure level.

The process evaluation will consist of participant surveys which will identify barriers to participation, improve program processes and assess overall participant satisfaction.

# A. Description

The purpose of this Program is to incent new construction that falls within the 2018 North Carolina Residential Building Code to meet or exceed the 2018 North Carolina Energy Conservation Code High Efficiency Residential Option("HERO"). If a builder or developer constructing to the HERO standard elects to participate, the Program offers the homebuyer an incentive guaranteeing the heating and cooling consumption of the dwelling's total annual energy costs. Additionally, the Program incents the installation of high-efficiency heating ventilating and air conditioning ("HVAC") and heat pump water heating ("HPWH") equipment in new residential construction.

#### **Audience**

The Program is available to builders and developers installing high-efficiency HVAC and HPWH equipment in new single family, manufactured, and multi-family residential housing units that are served under any of the Company's residential rate schedules.

The program is also available to builders and developers of new single family and multi-family residential dwellings (projects of three or fewer stories) that comply with all requirements of the 2018 HERO standard and are served under any of the Company's residential schedules. Manufactured housing, multi- family residential housing projects over three stories in height, and any other dwellings which do not fall within the 2018 North Carolina Residential Building Code, are not eligible for any whole-house incentives.

The Program also supports the initial homeowner for any home constructed to meet or exceed the HERO standard when the builder or developer elects to extend a heating and cooling energy usage guarantee to the homeowner. At the sole option of the builder or developer, homeowners may be offered a Heating and Cooling Energy Usage Limited Guarantee for homes with a HERS Index Score verified by a certified HERS rater calculating the heating and cooling energy usage that the home should use during an average weather year.

# **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	16,447	16,337	-109
Savings (MW)	7.10	4.66	-2.44
Participants		5,943	
2019 Program Expenses		\$15,080,405	

# D. Qualitative Analysis

# **Highlights**

The Program move to a whole-house incentive structure that pays incentives to builders for HERO- compliant homes based solely on annual kWh savings continues to drive builders toward increasing savings. The Program requested approval from RESNET to offer 34 courses online for rater CEU<sub>D</sub>s. The Program has provided on-site instruction to over 400 builders and trade allies.

Currently there are 580 builders and 28 approved raters registered in the Program. For 2019 the Program invoiced homes for 316 builders from 21 raters. ICF is responsible for the operational oversight of Home Energy Raters and builders or developers participating in the Program. A total of 14 formal trainings to 8 different builder organizations were provided resulting in over 230 individuals attending. These numbers are limited to formal events which does not include informal training. Informal training walk-throughs with builders occur at a much higher rate during regular Quality Control activities.

Ekotrope, an energy modeling software that is a cloud-based HERS rating software, was evaluated and approved in May as an approved software for the Program.

Whole-House Requirement	Eligibility	Incentive
HERO	Meet 2018 NCECC HERO	\$750
	standards	
HERO plus HERS Score	Meet HERO standards and submit	\$0.90/kWh
	confirmed annual kWh	
	savings from the Energy Summary	
	Report.	
	Equipment Description	Incentive
Tier 1	AC or heat pump with SEER (Seasonal Energy Efficiency Ratio) of 14 or greater but less than 15. The HVAC system must meet the Quality Installation Standard of 90%. High Efficiency Heat Pumps: The unit(s) shall be a minimum SEER of 14 with ECM. High Efficiency Central AC: The unit(s) shall be a minimum SEER of 14 with ECM.	\$250 per unit
QI	Quality Installation Standard (Optional for Tier 2).	\$75 per unit
Tier 2	AC or heat pump with SEER of 15 or greater.	\$300 per unit
Heat Pump Water Heater	ENERGY STAR qualified HPWH(s)	\$350 per unit
	with minimum Energy	
	Factor of 2.0.	

#### Issues

Air sealing in townhomes and multifamily projects continues to be a sticking point for many builders. While the North Carolina building code has specific requirements for fire-rated assemblies, there are different approaches being used to meet these requirements, and the acceptance and interpretations of these assemblies differs among code officials by jurisdiction. To assist builders, Program staff will work with various resources to identify code compliant separation wall assemblies and accepted air sealing methods. This information will provide builders and raters recommendations that will not only meet the code but also increase compliance with program standards. Program is partnering with NCBPA to perform technical research in support of the Program's interests in identifying townhome and multifamily assembly air sealing practices that meet or exceed minimum code and program requirements. BASF will provide technical support and research and development resources on an as-needed basis. Suppliers including Dow, Knauf Insulation and others will participate on an asneeded basis.

#### **Potential Changes**

The Program is considering modifying the incentives and eliminating non-cost-effective measures and measures that are no longer applicable. Those changes may include the following:

• Remove Quality Installation and Heat Pump Water Heater measures, as they are typically included when building to HERO standards and rarely implemented on a stand-alone basis.

# E. Marketing Strategy

The Company drove awareness in 2019 through various marketing channels that include but are not limited to the following:

- · Duke Energy Progress website
- · Community outreach events/HBA Parade of Homes
- · Social media promotions

These marketing efforts are designed to create customer awareness of builders participating in the Program and to educate customers on the quality, comfort and energy savings these homes offer. Please see Appendix for examples.

# F. Evaluation, Measurement and Verification

No evaluation activities occurred in 2019. It is anticipated that evaluation activities will begin in 2020, with a final report in 2021.

# G. Appendix







Exhibit 11 Page 51 of 64

# A. Description

The Energy Efficient Appliances and Devices program ("Program") offers a variety of measures to eligible Duke Energy Progress, LLC (the "Company") customers to facilitate a reduction in their energy consumption. The Program includes offers for lighting measures, smart thermostats, water measures and other energy efficient measures.

# **Online Savings Store-**

The Duke Energy Savings Store ("Store") is an on-demand ordering platform enabling eligible customers to purchase a variety of energy efficient products for their home. The incentive levels vary by product, and the customer pays the difference. Various promotions run throughout the year, offering customer reduced prices as well as shipping promotions, ranging from free to a reduced flat rate price.

The maximum number of incented products are listed below with the associated limits (per account)

- LED lighting, 36 per account.
  - LED lighting product offering is comprised of reflectors, globes, candelabra, 3-way, dimmable and A-line type bulbs. The incentive levels vary by bulb type
- Smart thermostats, 2 total
- Water measures, 3 total
- Smart Strips, 4 total
- LED fixtures (direct wires, portable, & outdoor photocell), limit 8 total
- Small appliance, dehumidifiers & air purifiers, limit 2 each total

Customers may choose to order additional products without the Company's incentive.

Customers can check eligibility and shop for specialty bulbs through four separate channels.

- 1) The Program Web Site: Customers can access the store via the program's public webpage on Duke-Energy.com. By clicking the "Shop Now" button, customers move to the store where they can purchase a variety of energy efficient products. Frequently asked questions are available to help customers learn more about the program and the sustainability benefits of using energy efficient products.
- 2) My Account: Customers enrolled in the Company's My Account may visit the Store and purchase a variety of energy efficient products. Upon login, eligible customers are intercepted with the Store offer. Customers can select "Shop Now" or "No Thanks." Additional links and promos within My Account also prompt customers to access the Store.
- 3) Phone Ordering: Customers can call a toll-free phone number and place their orders over the phone directly with the programs third party vendor.

The Store is managed by a third-party vendor, Energy Federation Inc. ("EFI"). EFI is responsible for maintaining the Store website, fulfilling all customer purchases, supporting the program call center, and recommending products. The store's landing page provided information about the store, product offerings, highlights promotions, account information and order history. Support features include a toll free number, chat, package tracking and frequently asked questions.

Educational information is available to help customers with their purchase decisions. This information includes videos and documents that speaks to how the customer can reduce their energy usage while maintaining comfortable atmosphere within their home.

Exhibit 11 Page 52 of 64

Product pages include application photos, product images, product specifications, purchase limits, and program pricing. Customers may place items in their shopping carts to purchase at a later time. Customers can pay for their purchases with a credit card or by check.

Benefits of the four distinct channels for the Savings Store include the following:

- Improved customer experience
- Advanced inventory management
- Simplified program coordination
- Enhanced reporting
- Increased program participation
- · Reduced program costs
- Quick and convenient
- Discounted pricing

# Save Energy and Water Kit Program

The Save Energy and Water Kit Program ("SEWK") launched in November 2015. The Program is designed to increase the energy efficiency of residential customers by offering customers energy efficient water fixtures and insulating pipe tape for use within their homes.

The SEWK program is offered through a selective eligibility process, enabling eligible customers to request a kit and have it shipped directly to their homes. Customers owning and living in a single-family home with an electric water heater who have not received similar measures through another Company-offered energy efficiency program are eligible for the program. Kits are available in two sizes for homes with one or more full bathrooms and contain varying quantities of shower heads, bathroom aerators, kitchen aerator and insulating pipe tape. Program participants are eligible for one kit shipped free of charge to their home.

Customers are pre-screened based on the eligibility requirements. Marketing channels include both a direct mail business reply card (BRC) and direct email. Customers receiving the BRC may choose to return the BRC, navigate to a redemption website listed on the card, or call a toll-free number to take advantage of the offer. Customers receiving a direct email simply click on a redemption link to redeem the offer online. Upon receiving the order from the customer through one of the methods above, Energy Federation Inc. (EFI), the program vendor, will ship the pre-determined kit to the customer. Due to the unique eligibility requirements of this program, direct mail (BRCs) and direct email are the only two methods being used to solicit customers for participation.

The program has a website in place that customers can access to learn more about the program or to watch videos to aid in installing the kit measures.

#### **Audience**

The Program is available to customers residing in a single-family home with an electric water heater who have not received similar measures through another Company-offered energy efficiency program.

#### **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	30,940	19,568	-11,372
Savings (MW)	8.91	5.47	-3.45
Participants		356,864	
2019 Program Expenses		\$2,156,010	

Exhibit 11 Page 53 of 64

# D. Qualitative Analysis

# **Online Savings Store**

# **Highlights**

The Online Savings Store was launched in DEP in Q3 2019 and provides an ecommerce platform that allows customers to purchase a variety of energy efficient products, including LEDs, smart thermostats, smart strips and more, at any time—delivered to their home. Over 13,317 orders were placed during 2019 resulting in the delivery of over 103,766 bulbs; 5,233 smart thermostats; 1,036 smart strips; 116 water products, 402 LED fixtures, and 3 small appliances (dehumidifiers) have been delivered to customers.

#### Issues

Educating and bringing awareness to the variety of products on the Store to eligible customers.

#### **Potential Changes**

Additionally, upgrading the entire site to improve the overall customer shopping experience and enhance certain features is also being planned for 2020.

# Save Energy and Water Kit

In 2019, the Program distributed over 246,000 water measures in over 25,000 kits to Duke Energy Progress customers in the Carolinas. These kits delivered approximately 51,486 bath aerators, 25,743 kitchen aerators, 40,364 showerheads, and 128,715 feet of pipe insulation. In 2Q 2019, Duke Energy added the ability for customers redeeming the offer online to upgrade their showerhead(s) to wide pattern or wand showerheads at low cost. Upgrades showerheads accounted for 6.32% of all showerheads shipped in 2019.

#### **Issues**

The program was successfully launched without any issues regarding ordering, fulfillment or support of the program. EM&V data shows a higher percentage of gas water heater customers participated in the program in 2016 than expected. In 2017, the electric water heater propensity model was updated in order to reduce participation by customers with gas water heaters.

#### **Potential Changes**

The Program continues to review new measures as replacement or upgrade options for the program.

#### E. Marketing Strategy

#### **Online Savings Store**

The marketing efforts for the store can include the following:

- bill messages
- bill inserts
- email campaigns
- direct mail
- and other digital media channels

Examples of the marketing pieces can be found in the Appendix. Awareness and education will continue to be a focus in collateral messages to eligible customers, as well as highlighting great pricing and other promotional offerings such as free shipping.

# Save Energy and Water Kit

The overall strategy of the program is to reach residential customers who have not adopted low flow water devices.

Both direct mail marketing in the form of BRCs and direct email are the current marketing channels being utilized by this program in the Carolinas. O Email solicitation and online ordering continue to grow. As a result, the paper and cost associated with traditional mail solicitations continues to decline. Examples of the updated kit materials, direct mail, and direct email are included in the Appendix.

# F. Evaluation, Measurement and Verification

# **Online Savings Store**

No evaluation work for Online Savings Store was conducted in 2019 due to the recent program launch. While future evaluation activities are dependent upon sufficient participation, tentative plans are to have a DEP final report in the fourth quarter of 2021 combined with DEC.

# Save Energy & Water Kit

Evaluation activities began in 2019. A combination of survey, engineering, and billing data techniques may be applied to assess the energy and peak demand impacts of the SEWKP in DEP and DEC territories. Participant surveys and engineering methods will be used to quantify savings from the measures provided in the kit and may be used to assess free ridership and spillover. The final evaluation report tentatively scheduled for 2<sup>nd</sup> Quarter 2020.

# G. Appendix

# **Online Savings Store**

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# August -





# October-

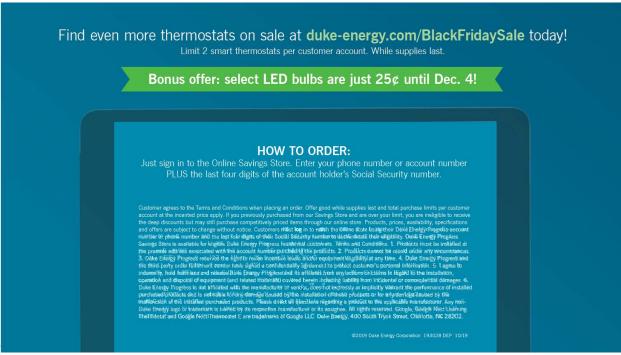




# **November**







**December** 





# Save Energy and Water Kit Program Installation Guide











# Save Energy and Water Kit Program Thank You Survey Card



# Save Energy and Water Kit Program Direct Mail

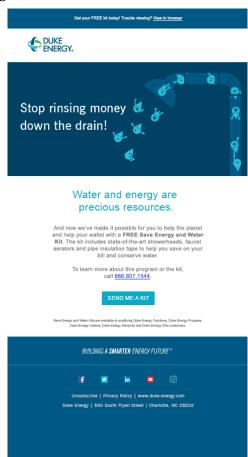


# Save Energy and Water Kit Program Direct Mail





# Save Energy and Water Kit Program Direct Email



#### A. Description

The purpose of the Duke Energy Progress ("Company") Small Business Energy Saver program ("Program") is to reduce energy usage through the direct installation of energy efficient measures within qualifying non-residential customer facilities. All aspects of the Program are administered by a single Company-authorized vendor. Program measures address major end-uses in lighting, refrigeration, and HVAC applications.

Program participants receive a free, no-obligation energy assessment of their facility followed by a recommendation of energy efficiency measures that could be installed in their facility along with the projected energy savings, costs of all materials and installation, and the amount of the up-front incentive the Company. The customer makes the final determination of which measures will be installed after receiving the results of the energy assessment. The vendor schedules the installation of the energy efficiency measure at a convenient time for the customer, and electrical subcontractors perform the installation.

The Program is designed as a pay-for-performance offering, meaning that the vendor administering the Program is only compensated for energy savings achieved through the installation of energy efficiency measures.

#### **Audience**

The Program is available to non-residential customers that are not opted-out of the Company's EE/DSM rider and have an average annual demand of 180 kW or less per active account.

# **B & C. Impacts, Participants and Expenses**

2019 YTD Results	Annual Forecast	Actual at 12/31/2019	Variation
Savings (MWH)	46,011	34,745	-11,266
Savings (MW)	8.95	5.82	-3.13
Participants		33,301,332	
2019 Program Expenses		\$7,346,426	

#### D. Qualitative Analysis

#### **Highlights**

Lime Energy is the Company-authorized vendor administering the Program in both DEC and DEP service areas.

In 2019, the Company implemented a modification to the Program incentive design to offer higher, tiered incentives for deep energy retrofit projects with multiple measure technologies, actively incentivizing customers to undertake efficiency upgrades beyond lighting. Ultimately, the Company would like for the Program to encourage customers to take on more comprehensive energy efficiency upgrades to maximize energy savings. The goal was to reduce projects that just completed lighting measures from previous program years. The tiering was successful reducing the lighting only projects from over 80% in previous years to 53% in 2019.

The Company has administered a customer satisfaction survey to Program participants since the Program's launch in DEC. The survey during 2019 was changed to be a net promotor school from just measuring customer satisfaction. The new survey changes reported data from past program years. Overall the new survey results still show that program participants overwhelmingly view Duke Energy in a positive light after participation in the Program.

Exhibit 11 Page 64 of 64

#### Issues

While LED lighting measures are expected to remain the primary driver of kWh savings in the Program for the foreseeable future, the Company has been actively working with our vendor Lime Energy to implement initiatives focused on increasing refrigeration and HVAC measure adoption.

# **Potential Changes**

As the Program matures, the Company will continue to evaluate opportunities to add incentivized measures which fit the direct install program model and are suitable for the small business market. In addition, the Company is also looking at possible modifications that would allow customers to participate in an Efficiency as a Service payment model were the energy savings would be used to pay off the project cost reducing the financial impact to customers with limited available funds.

# E. Marketing Strategy

The Program is marketed primarily using the following channels:

Lime Energy field representatives

Direct mail (letters and postcards to qualifying customers)

Duke Energy Progress website

Email & Duke Energy Business E-Newsletters

Social media and search engine marketing

Direct marketing & outreach via Program administrator

Outreach via Duke Energy Business Energy Advisors

Community events

All marketing efforts are designed to create awareness of the Program, to educate customers on energy saving opportunities, and to emphasize the convenience of participation for the target market.

# F. Evaluation, Measurement and Verification

No evaluation activities occurred in 2019. It is anticipated that future evaluation activities will begin in 2020, with a final report tentatively planned for the first quarter of 2021.